## **Abstract**

A method and a unit for determining the spatial position of a wheel rim with respect to a measuring unit having at least one camera, wherein the wheel rim lies in the viewing field of the camera, including making available of a model, that describes a model body of a localizable wheel rim geometry detail as well as the spatial position of the model body with respect to the measuring unit, through model parameters, capturing of a picture of the wheel rim geometry detail of the wheel rim with the camera, fitting the image of the model body resulting from the model parameters to the picture of the wheel rim geometry detail through changing the model parameters of the model, and tracking the changes of the model parameters upon the fitting, whereby the data related to the position of the model body of the wheel rim geometry detail reflect the spatial position of the wheel rim-geometry detail and, thereby, the wheel rim itself, when the image resulting from the model parameters, of the wheel rim-geometry detail fits to the captured picture of the wheel rim geometry detail within the asserted tolerance limits. The invention also relates to a wheel alignment measuring method and to a wheel alignment measuring system that uses said method and said unit.

Figure 10